

## Tinytag View 2 Temperature/Relative Humidity Logger (-25 to +50°C/0 to 100% RH) Grey Case

### TV-4501

#### Issue 8

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E&OE

Tinytag View 2s are a range of data loggers with displays. Featuring high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor, these units are housed in splash-proof (IP65 rated) cases.

The TV-4501 is a self contained temperature and relative humidity data logger. This unit features a coated RH sensor that has good resistance to moisture and condensation, ensuring measurement reliability in applications where a visual display of temperature and humidity is required in addition to data logging.

This unit is an unobtrusive grey colour for use in museums and art galleries.

#### Popular Applications

- Museums and art galleries
- Document and archive monitoring
- Environmental monitoring

#### Features

- Temperature and relative humidity recorder
- LCD display of current readings
- 30,000 reading capacity
- High accuracy
- High reading resolution
- Fast data offload
- Splash-proof case
- Low battery monitor
- User-replaceable battery





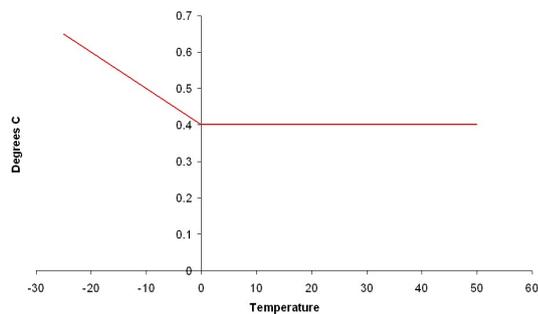
**Features**

|                               |  |
|-------------------------------|--|
| <b>Total Reading Capacity</b> | 30,000 readings  |
| <b>Memory type</b>            | Non Volatile   |
| <b>Display</b>                | 4 digits + indicators  |
| <b>Display Modes</b>          | °C or °F / %RH   |
| <b>Display Refresh Rate</b>   | Every 2 seconds<br>(alternating temperature/humidity)          |
| <b>Trigger Start</b>          | Magnetic Switch  |
| <b>Delayed Start</b>          | Relative / Absolute<br>(up to 45 days)                         |
| <b>Stop Options</b>           | When full<br>After n Readings<br>Never (overwrite oldest data) |
| <b>Reading Types</b>          | Actual, Min, Max   |
| <b>Logging Interval</b>       | 1 sec to 10 days   |
| <b>Offload</b>                | While stopped or when logging in minutes mode                  |
| <b>Alarms</b>                 | 2 fully programmable; latching                                 |

**Reading Specification**

|                           |                                  |
|---------------------------|----------------------------------|
| <b>Temperature</b>        |                                  |
| <b>Reading Range</b>      | -25°C to +50°C (-13°F to 122°F)  |
| <b>Sensor Type</b>        | 10K NTC Thermistor (Integral)    |
| <b>Response Time</b>      | 10 mins to 90% FSD in moving air |
| <b>Logger Resolution</b>  | 0.02°C or better                 |
| <b>Display Resolution</b> | 0.1°C or 0.1°F                   |

**Logger Accuracy**



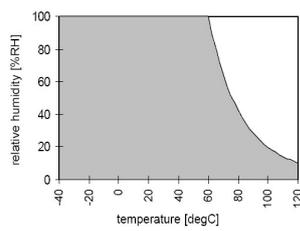
**Relative Humidity**

|                           |  |
|---------------------------|--|
| <b>Reading Range</b>      | 0 to 100% RH   |
| <b>Sensor Type</b>        | Capacitive (Integral)  |
| <b>Accuracy</b>           | ±3.0% RH at 25°C / 77°F                                      |
| <b>Reading Resolution</b> | Better than 0.3% RH  |
| <b>Response Time</b>      | 40 seconds to 90% FSD (current data loggers, from SN 612487) |
| <b>Display Resolution</b> | 0.1% RH  |

**RH Sensor Working Range**

The working range for the RH sensor is shown in terms of relative humidity / temperature limits.

Although the sensor will not fail beyond these limits, the accuracy will deteriorate.



**Physical Specification**

|                           |                               |
|---------------------------|-------------------------------|
| <b>IP Rating</b>          | IP65 splash proof (see notes) |
| <b>Operational Range*</b> | -25°C to +70°C                |
| <b>Case Dimensions</b>    |                               |
| <b>Diameter</b>           | 60mm / 2.36"                  |
| <b>Length</b>             | 90mm / 3.54"                  |
| <b>Width</b>              | 65mm / 2.56"                  |
| <b>Depth</b>              | 35mm / 1.38"                  |
| <b>Weight</b>             | 85g / 3oz                     |

\*The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record.

**Notes**

The battery fitted in this product is a single cell containing less than 1g of lithium and meets the requirements of the UN Manual of Tests and Criteria, Part III, Subsection 38.3.

**Recommended Battery Types** SAFT LS14250, Tekcell SBAA02P or Eve ER14250

The logger will operate with other 1/2AA 3.6V Lithium batteries but performance cannot be guaranteed.

**Replacement Interval** Annually

Before replacing the battery the data logger must be stopped.

After removing an old battery from a logger, wait five minutes before inserting the new one.

Data stored on the logger will be retained after a battery is replaced.

The clarity of the display may change at extremes of temperature.

If used at low temperatures the data logger should be allowed to warm to room temperature before it is opened to avoid condensation forming inside the unit.

The IP65 rating is valid only when the unit's connector cap is securely fitted.

The coated sensor used on this unit (current product, SN 612487 and above) provides good protection from moisture and condensation, but in some cases - where the sensor becomes saturated - readings may become unpredictable. Once the sensor has dried out, and provided no residue is left behind, the unit should return to normal reading within 30 minutes.

Any dust, salts or residue that is allowed to build up on the RH sensor will affect the unit's reading accuracy.

The sensor may be cleaned with de-ionised water but not with pure isopropanol or abrasive detergents, as these may damage the coating on the sensor and effect its accuracy.

The RH sensor will resist small amounts of the following chemicals: formaldehyde, ammonia, carbon monoxide, sulphur dioxide, ethylene oxide, hydrogen chloride, hydrogen fluoride, hydrogen peroxide, nitrogen dioxide, methyl chloride, chlorine, freon, methanol, ethanol, isopropanol and ozone. It also offers resistance to ultraviolet rays.

data sheet



### Calibration

This unit is configured to meet Gemini's quoted accuracy specification during its manufacture.

We recommend that the calibration of this unit should be checked every six months against a calibrated reference meter.

A certificate of calibration, traceable to a national standard, can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a service calibration.

### Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.



### Required and Related Products

To use this data logger you will require the following software:

SWCD-0040: Tinytag Explorer software

and a

CAB-0007-USB: Tinytag Ultra/Plus/View USB Download Cable

The SWCD-0040 software and CAB-0007-USB cable can be ordered together in a pack using the part number SWPK-7-USB.

#### Further Related Products

SER-9500: Tinytag Data Logger Service Kit

ACS-6000: Trigger Start Magnet